STATE OF IDAHO Department of Fish and Game

Joseph C. Greenley, Director

Annual Project Closing Report

PAHSIMEROI RIVER DEVELOPMENT OF SUNNIER CHINOOK STOCKS

Project No. 88272403

Contract No. 03-5-208-00026

Period Covered: July 1, 1974 to June 30, 1975

Columbia River Fisheries Development Program

October, 1975

# Pahsimeroi River Development of Summer Chinook Stocks

## Fish Collection

Chinook salmon were collected at the Idaho Power Company weir on the Pahsimeroi River. Fish arriving at the weir prior to July 15 were counted and released to spawn above the weir. Fish arriving at the weir after July 15 amounted to 155 and were held for egg-taking. This figure was about 25% of average. The run into the Pahsimeroi facilities peaked in early August (Table 1).

## Egg Taking

In September, we took 220,000 eggs. Eye-up percentage was 78%, leaving 172,000 eggs which were transferred to Mackay Hatchery for rearing.

## Rearing

The fish were reared at Mackay Hatchery from October, 1974, to March, 1975. A total of 118,000 summer chinook fingerlings (410 pounds) at 288 per pound were transported to and planted in the Pahsimeroi River rearing pond. The chinook in the pond were fed daily.

### Release

We released 114,560 summer chinook fingerlings (1974 brood year) on May 30. The fish were released directly into the Pahsimeroi River from the rearing pond and out-migration appeared to occur rapidly. The fish averaged 40 per pound and 104.3 mm at time of release. Survival from green egg to release was 52.1%. The release included 25,000 fish with a left ventral fin clip.

## Return of Adults

Evaluation of the return of adults, by recovery of fin-marked fish, progress was possible for a complete life cycle of fish in 1974. Assuming that marked and unmarked chinook returned at the same rate, 145 fish returned from the 1970 brood year. The percentage return for the 1970 brood year was computed to be 0.058 (Table 2).

Prepared by:

Approved by:

IDAHO DEPARTMENT OF FISH AND GAME

David W. Ortmann Anadromous Fishery Supervisor

Joseph Cl Greenley, Director

Stacy Gebhards, Chief Bureau of Fisheries

Table 1. Timing of arrival of adult summer chinook salmon at Pahsimeroi River trap, 1974.

<u>Date</u>	Number of fish	Cumulative total		
July 8	1	1		
July 9				
July 10				
July 11	1	2		
July 12				
July 13	2	4		
July 14				
July 15				
July 16				
July 17				
July 18	12	16		
July 19				
July 20				
July 21				
July 22	11	27		
July 23				
July 24				
July 25	8	35		
July 26				
July 27				
July 28				
July 29	13	48		
July 30				
July 31				
August 1				
August 2 August 3				
August 4				
August 5				
_				
August 7				
August 7 August 8				
August 9	10	0.1		
August 10	10	91		
August 11				
August 12	7	0.0		
August 13	ı	98		
August 14				
August 15				
August 16				
August 17				
August 18				
August 19	6	104		
August 20	Č	201		
August 21	2	106		
_	•	200		

Table 1. Timing of arrival of adult summer chinook salmon at Pahsimeroi River trap, 1974 (continued).

<u>Date</u>	Number of fish	<u>Cumulative total</u>
August 22 August 23 August 24 August 25		
August 26 August 27 August 28	4	110
August 29 August 30 August 31	8	118
September 1 September 2		
September 3 September 4	5	123
September 5 September 6	7	- 130
September 7 September 8 September 9		
September 10 September 11		
September 12 September 13 September 14	'11	141
September 15 September 16 September 17		
September 18 September 19 September 20	10	151
September 21 September 22 September 23		
September 24	4	155

Table 2. Summary of operations, Pahsimeroi River summer chinook propagation project.

Eggs	Time of	Number		Number		Adult Returns1/			
taken	release	released	Size	marked	Mark	Jacks	2-ocean	3-ocean	Percent return
464,150	May, 1970	393,840	40/lb. 102 mm	-0-					
443,772	May, 1971	252,071	49/lb.	50,500	RV	0 (1972)	75 (1973)	70 (1974)	0.058
356,628	May, 1972	102,000	46/lb.	52,000	LV / An	0 (1973)	25 (1974)	(1975)	
	Sept., 1972	129,182	11/lb.	46,000	RV / An	1 (1974)	(1975)	(1976)	
383,000	May, 1973	217,000	50/lb.	30,000	RV	22 (1974)	(1975)	(1976)	
496,860	May, 1974	330,037	41/lb.	-0-		(1975)	(1976)	(1977)	
219,000	May, 1975	114,560	40/lb. 104 mm	25,000	IV	(1976)	(1977)	(1978)	
	taken 464,150 443,772 356,628 383,000 496,860	taken release  464,150 May, 1970  443,772 May, 1971  356,628 May, 1972  Sept., 1972  383,000 May, 1973  496,860 May, 1974	taken release released  464,150 May, 1970 393,840  443,772 May, 1971 252,071  356,628 May, 1972 102,000  Sept., 1972 129,182  383,000 May, 1973 217,000  496,860 May, 1974 330,037	taken release released Size  40/lb. 464,150 May, 1970 393,840 102 mm  443,772 May, 1971 252,071 49/lb. 356,628 May, 1972 102,000 46/lb. Sept., 1972 129,182 11/lb. 383,000 May, 1973 217,000 50/lb. 496,860 May, 1974 330,037 41/lb. 219,000 May, 1975 114,560 40/lb.	taken         release         Name of the property of	taken         release         Size         Marked         Mark           464,150         May, 1970         393,840         102 mm         -0-            443,772         May, 1971         252,071         49/lb.         50,500         RV           356,628         May, 1972         102,000         46/lb.         52,000         LV / An           Sept., 1972         129,182         11/lb.         46,000         RV / An           383,000         May, 1973         217,000         50/lb.         30,000         RV           496,860         May, 1974         330,037         41/lb.         -0-            219,000         May, 1975         114,560         40/lb.         25,000         IV	taken         release         Size         Marked         Mark         Jacks           464,150         May, 1970         393,840         102 mm         -0-            443,772         May, 1971         252,071         49/lb.         50,500         RV         0 (1972)           356,628         May, 1972         102,000         46/lb.         52,000         LV / An         0 (1973)           Sept., 1972         129,182         11/lb.         46,000         RV / An         1 (1974)           383,000         May, 1973         217,000         50/lb.         30,000         RV         22 (1974)           496,860         May, 1974         330,037         41/lb.         -0-          (1975)           219,000         May, 1975         114,560         40/lb.         25,000         IV         (1976)	taken         release         Size         Marked         Mark         Jacks         2-ocean           464,150         May, 1970         393,840         102 mm         -0-             443,772         May, 1971         252,071         49/lb.         50,500         RV         0 (1972)         7E (1973)           356,628         May, 1972         102,000         46/lb.         52,000         LV / An 0 (1973)         2E (1974)           Sept., 1972         129,182         11/lb.         46,000         RV / An 1 (1974)         (1975)           383,000         May, 1973         217,000         50/lb.         30,000         RV 22 (1974)         (1975)           496,860         May, 1974         330,037         41/lb.         -0-          (1975)         (1976)           219,000         May, 1975         114,560         40/lb.         25,000         IV         (1976)         (1977)	taken         release         Size         marked         Mark         Jacks         2-ocean         3-ocean           464,150         May, 1970         393,840         102 mm         -0-             443,772         May, 1971         252,071         49/lb.         50,500         RV         0 (1972)         75 (1973)         70 (1974)           356,628         May, 1972         102,000         46/lb.         52,000         LV / An (0 (1973))         25 (1974)         (1975)           Sept., 1972         129,182         11/lb.         46,000         RV / An (1974)         (1975)         (1976)           383,000         May, 1973         217,000         50/lb.         30,000         RV (22 (1974)         (1975)         (1976)           496,860         May, 1974         330,037         41/lb.         -0-          (1975)         (1976)         (1977)           219,000         May, 1975         114,560         40/lb.         25,000         IV (1976)         (1976)         (1977)